

The Impact of Procurement Strategies on Supply Chain Sustainability in the Pharmaceutical Industry

 Kahkshan Asif ^{1*}

¹Independent Researcher, Karachi, Pakistan

*Corresponding Author Email: kahkshan.asif@yahoo.com

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ABSTRACT

In today's society, procurement plays a significant role in sustainability because of the vital requirement and demand for improvement in some supply chain processes and procurement practices. It helps make rational decisions that encompass society's economic, social, and environmental parts. Corporate sustainability requires such abilities to impact external firms in the supply chain process. In the Economic advancement markers at worldwide, public and neighbourhood levels advance sustainability approaches, as they represent the advancement in the supply chain process. This study used a quantitative research method followed by a convenient sampling technique for data collection from 102 respondents. This study found that procurement strategies significantly influence supply chain sustainability. The present study was conducted in the urban areas of Karachi, Pakistan. The study findings can benefit the manufacturing industry and society by implementing green purchasing and relevant, sustainable elements.

Keywords: Green purchasing, Social factors, Economic factors, Environmental factors, Green supply chain management, Pakistan

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1. Introduction

The pharmaceutical industry plays a significant role and is prime in the supply of life-saving medicines to this society. Pharmaceutical industries can influence the environment and impact society in many ways; patients improperly discard pills or tablets, expired and unutilized medicines, pesticides and molecular farming waste exclusion, pharmacies mishandling drugs, etc. (Hashmi et al., 2020). An ever-increasing request for items and their utilization has put weight on mechanical yield and their supply chains, resulting in adverse environmental and societal consequences. Increased levels of contamination and natural disasters produced by mechanical generating have prompted a few analysts and industry experts to focus on challenges related to maintainable generation and utilization within the context of Sustainable Supply Chain Management (Alam, 2022; Rasheed, 2022). The sustainable flow of goods Management has ended up with a theme of having extraordinary intrigued. It is connected to the suspicion that a more maintainable execution for businesses would be accomplished on its usage. Such execution has got to be accomplished in all three measurements of maintainability (Rashid et al., 2019; Rashid & Rasheed, 2022).

Further, sustainable growth is composing a plan of action incorporating various steps of human action that were a distinct feature previously, based on moral consideration concerning human responsibility for the environment. Sustainable supply chain complexity is a management conception that leads to far away performance of supply chain process. Putting efforts into environmentally and socially sustainable supply chain leads to benefits for current and the upcoming generations to a great extent, filling out the lucidity in the management of supply chain process into right-handed, economical, lawful, social and technical features of performance (Zimon et al., 2019; Hashmi & Mohd, 2020). Supply chain administration, which covers raw materials, finished goods, and data flow, has become a critical concern in advanced manufacturing and service frameworks. Supply chain management necessitates the effective use of resources and data that extends beyond the fulfilment of a client's request, a stream of goods and services. Within literature and most nonacademic assets, sustainability is defined as the ability to support a hone or prepare or as a reference to innate awareness. Both interpretations are substantial yet fragmented. Maintainability is directly linked to the idea of feasible improvement, characterized as "the innovation that satisfies the wants as in show without affecting the capacity of upcoming eras to suit their claim demands". The literature on sustainability of supply chains centres on audits conjointly many ideas to join supportability. Be that as it may, most of the existing literature considers as it were financial and natural perspectives of maintainability (Türkey et al., 2016). Environmental control of purchasing and the supply chain (specifically green purchasing) is now remarkably commonplace in the middle of larger companies and it shows that it is also increasingly used as a corporate practice. Participation in recycling initiatives demands close coordination with all the business partners, like an alliance with vendors to eliminate waste in raw and packaging (Hamner, 2006; Amjad, 2022).

Supplier management is a modified process that identifies that all the vendors are different from each other, and diversification is not required in customer-supplier partnerships with many different strategies. When this alternative is achieved, there is a great possibility to get better gain and value from both the offered services and the products procured. This can be achieved by the organization's involvement with the team and function in an organized way. Following the mass manufacturing model of managing business partners is not easy for all organizations. Many Organizations have distinct needs and varying supply networks against which they use to create supplier partner relationships better. Logistics management is also a part of the supply chain and plays a vital role in supply chain sustainability, implying the system is designed to move goods physically. Supply chain professionals describe the process of logistic management which is responsible for planning or designing,

implementing, and controlling efficient forward and reverse flows of goods, assistance, and any other alliance details between production and consumption. The main objective of logistics management is to meet customer requirements. In every firm, there are different logistics operations and different evaluation criteria (Amjad, 2022, Rasheed, 2022). Further, procurement has a vital role in sustainability as there is a demand for improvement in some policies and practices to enlarge firms' limitations in incorporating their whole frame of supply chain process. Proper Guidelines on sustainability inspire procurement to make rational decisions that encircle society's economic, environmental and social components. In corporate sustainability, procurement in handling the process is strenuous and requires excellent ability to impact external firms in the supply chain. Sustainability ways are being advised by various approaches that started economic advancement markers at worldwide, public and neighbourhood levels. These rules represent the expansiveness and intricacy of the subject (Meehan & Bryde, 2011; Anwar, 2022).

The Pharmaceutical flow of goods is mindful and accountable for impressive natural and product quality influence. Green chemistry may be a frame of recycling economy in the pharmaceutical flow of goods. Coordination of a supply chain that is moving forward is significant, including medications invert transportation (Viegas et al., 2019; Hashmi et al., 2020a). The long-running debate about drug industry costs, benefits, and development has resurfaced. In a few key ways, the pharmaceutical industry differs from other businesses. Since the 1930s, most high-intensity medications have only been available via prescription in the United States. In this regard, the purchaser and the utilization chief (the recommended doctor) are not the same. During the 1930s and 1940s, there was an uprising in medicine disclosure strategies, resulting in the introduction of over 1,200 new synthetic drugs into the United States, helpful practice since 1940. Few doctors can fully educate themselves about the available other possibilities because the drug menu is so vast and complex. Disappointments with data thrive.

Outside repayment arrangements developed by the government and private guarantors are expected to reimburse 44 per cent of physician-recommended prescription costs in 1987, up from 28 per cent in 1977. As a result, the physician-recommended medicine purchaser is frequently removed from the item dynamic and from following through on the whole cost associated with a decision. With these advancements has come a second shift in drug disclosure and improvement strategies. The essential logical investigation has begun to enlighten the compound instruments of disease, permitting R&D groups to plan-made medication particles with underlying features that communicate with target receptors in the human body in predictable ways. Genetic engineering has made it possible to clone freak creatures with desired therapeutic qualities and to replicate difficult-to-select human immunogens. Consequently, during the 1990s, the proportion of novel compounds appealing to regulatory approval skyrocketed. As a result, finding balance among monetary impetuses, rivalry, and restrictions has become even more critical (Scherer et al., 1993; Hunaid et al., 2022).

There is still much work to be done in developing a global supply chain sustainability metric. One of the essential takeaways from this research is the flow of building estimation may be even more essential than the actual measurement. For starters, the process requires — producers/manufacturers, vendors, governments, and end users to consider sustainability in the broader sense. Furthermore, this then highlights the importance of considering the complete flow of products instead of simply particular components. Decision-makers can concentrate narrowly on the most appealing and maybe convenient criteria or links. An athletic shoe manufacturer can minimize harmful ingredients while overlooking the sweatshop conditions in which the shoes are made. A big shop can concentrate on logistics and transportation. Cost reduction in the meantime neglecting the influence of consumption patterns on the environment made possible by discarded products. We can begin to make headway toward true sustainability allowing — or even forcing — managers to notice a problem's more significant standpoint (Sloan, 2010; Baloch & Rashid, 2022).

It is not, at this point, enough for firms to be concerned uniquely with looking for a benefit - they ought to likewise give something back to society everywhere, limit their adverse consequences on the climate and have some obligation regarding the conduct of their providers on issues, for example,

child labour, well-being and security and contamination. Supply chain management (SCM) is the administration of an organization of affiliated associations engaged with the arrangement of items and administrations to end clients (Walker & Jones, 2012; Shaheen, 2022). Effective commodities SCM process supports environmental sustainability as it dramatically impacts environmental changes. A supply chain can cause the emergence of greenhouse gas emissions, harmful and deadly gases, deforestation, etc. Thus, environmental sustainability set off the main body of the organizations (Hamner, 2006). Supplier management cannot be applied without a fundamental change in the procurement process. Moreover, innovations are needed to cooperate with all business partners in the supply chain network. The supplier and the customer should align together in close coordination. This occurs at the product or service level, which increases indulgence in an evaluation and the sourcing process in the supply chain framework (Alam, 2022). Therefore, this study will evaluate the effect of procurement strategies on supply chain sustainability.

RQ: Based on the research problem and objectives, this study will seek empirical answers to what extent the procurement strategies influence supply chain sustainability. That would provide a pathway to future strategies for supply chain sustainability.

2. Literature Review

2.1 Procurement Management

Numerous creators concur that taking after components makes the provider choice-making system complex. The variables follow; (1) mixed and variety of criteria: both subjective & quantitative, (2) criteria conflict: clashing targets of scenarios, (3) Inclusion of the numerous choices: Since of increased level competition, and (4) inside & outside obliges about purchasing. In any case, it takes a parcel of work effort and persistence to create this organization. Since the correct provider choice preparation includes several roles like acquiring, within the company, quality, and so forth, several objectives may span many important and metaphysics variables in a very progressive way. A compelling provider means vendors that are capable supply the correct sum of items or administrations at the right time, at the right price, and with the right quality (Mwikali & Kavale, 2012). In the last two decades, the significance of procurement as a strategic concern for businesses was expanded. This is attributable to a number of causes, including rising purchasing costs, globalization, and a surge in outsourcing tactics. As a result, there seems to be a change in one-time transactions and the long-haul relationships that place a greater emphasis on suppliers as a primary source of revenue. Developing a tight relationship with suppliers allows gaining access to their resources, which can help expand organizational operations. This method also emphasizes that the purchaser must control the entire supply process, not just the flow of merchandise and services to the organization. Environmental & societal issues lead to the complexity of today's purchase decisions and processes.

According to this viewpoint, today's shoppers must consider factors other than the financial matrix when purchasing. Purchasers must also keep an eye on a brand new batch of hazards, like workers, safety, resource pollution and waste, as well as the possibility of a destructive impact on their company's image and the societal influence on purchasing actions. Because today's rivalry is centred on supply chains rather than organizations, the focus is on how to provide a reliable supply chain with plenty of redundancy, reliability, efficiency and response. Nobody can afford expenditures that exceed profit; this is attainable with real-time description and data at various supply chain nodes and accurate information transmission to the next level and speed (Modgil & Sharma, 2017). Through a web-based network of communications, information systems assist organizations in developing strategic partnerships with suppliers. The part of buying in supply administration has gotten and proceeds to get expanding consideration as the years go. On the other hand, many variables impact a company's decision-making ability. There should have to be a clear understanding of the provider determination criteria. A few factors firms consider incorporate belief and commitment, satisfactory back, quality, solid conveyance times, and satisfactory logistic technological capabilities (Mwikali & Kavale, 2012).

One more major way that organizations have strived to level up the growth and their company's

long-term viability is determined by involving environment-related issues and problems in their progressive issues of purchasing. Firms can, for example, collaborate with suppliers to discover raw materials with a lower environmental impact. Analysts measured the crucial features of environmentally friendly sourcing as well as the more practical aspects. In precise, there has been a tremendous amount of progress. Functioning point in terms of the environment, in addition, to a lower extent, social environment proportion of business line's long-term viability. Though, most of this study observed the single framework or businesses that are solely focused on one thing parameter distinctively. Tasks and Works investigating the incredible process of the supply chain context are essentially descriptive. In modern years, different organizations have started multiple attempts to 'green' their fields and businesses. The impulsion for these attempts is from the external factors. Like, producers of huge and bulk appliances must follow new rules regarding the recovery and maintenance of their products as they build the coming peer group of washers and dryers. Manufacturers have re-analyzed the unwanted or excess from their system to minimize the emissions, conserve energy, and find the best productive substitutes for breakdown products. Several organizations, citizens, and governments understand today there is a requirement and impact to move beyond green and have already started observing with a sense of growth and long-term viability. Generally, sustainable growth is clarifying in terms of economic activities that fulfil the requirements of the current situation without understanding the capacity of upcoming generations that encounter their requirements (Rashid et al., 2020; Hashmi et al., 2020).

Another primary side of the study links with the 'global' functions or performance estimation, which is how one evaluates the results of industries, countries and economies. Specific part encircles the progress of many combined parameters: mixed dimensions count the structure that finds the critical ideas and logic like human welfare, competition among industries, and the health care system's overall performance. During this time, several worthy learning can be derived that do not approach actual presentation measures as a result of this work from which team leads could utilize the improvement of sustainable supply chain flow. The motive of that research is to build the conceptual ground for the growth of the target to count the sustainability of the global supply chain. With the continuation of chasing the motive, the research paper creates three benefits. One, it explains the overview of the techniques and treatments recently utilized by companies for incorporating sustainability into business activities. Another is to launch a new workflow for consideration and to find out supply chain sustainability. The third one is to represent three studies' calculations that link to the worldwide parameters of the sustainability of the flow of supply chain process, which can be taken that results motivation and inspiration for the future conceptual and investigational studies from the research of Sloan (2010). Fast floating awareness in the industry that today's supply chains are defective or flawed. Up to the present, different companies, i.e., manufacturing, create waste and pollution and its fearsome for the existence of life on earth. Therefore, these pressures and challenges push organizations to seriously act on the impact on the environment during their business practices. As the majority in the world enlarges and the availability of resources reduces or minimizes, many firms or companies understand that the process of supply chains must also be re-designed in the current scenario. In the views of firms, they must picture the environmentally friendly view of the products, the processes, systems and technologies, and the process in which business is carried out.

Further, procurement refers to the act of locating, agreeing to terms, & obtaining items, services or tasks provided by a third party, most commonly by an offer and a cutthroat offer. When quality, quantity, time, and cost are taken into consideration, that interaction is used to ensure that the purchaser gets the best possible at the lowest possible cost for a product, service, or work. Financial limits on businesses and mass customization for clients add to the complexity, requiring businesses to use acquisition metrics as an effective tool for delivering results advantages within any cost of sourcing and operational cost. As a result, procurement is becoming increasingly paramount for chiefs & inventory network heads to figure out ways to make the most of digitalized procurement approaches to stay relevant in the organization (Gupta, 2019).

2.2 Supply Chain Sustainability

This section discusses the development of a quantitative measure of supply chain sustainability.

The purpose of this research is to develop a framework for a metric that captures the core of this inherently multi-dimensional and complex idea. However, it also poses a variety of measuring issues. There are five processes involved in the generation of composite indicators, according to the findings: 1. Create a conceptual framework, 2. determine & generate, 3. Standardize data, 4. Weight and categorization variables, and 5. conduct a sensitivity analysis. Almost all sectors have their own set of difficulties. The most difficult task is to create a conceptual framework. Several sustainability frameworks have been established, the majority of which are related to country performance. The linkage between supply chain quality, by and large, is characterized as the number and quality of the providers and clients in a nation, and the three measurements of feasible improvement to be specific natural execution, corporate natural hones, and social supportability is evaluated. The outcome demonstrates that supply chain quality is connected to all three measurements of maintainable improvement (Vachon & Mao, 2008; Rasheed, 2022). Environmental, societal, and economic considerations all play a role in sustainability. Some variables related to each dimension are listed below.

2.2.1 Environmental factors

The term "environment" is most commonly used to refer to the natural environment, which comprises all living and non-living items found in nature on earth, such as land, water, plants, and animals. Lowering the supply chain's ecological footprint is one way to improve environmental sustainability. Of the three areas of supply chain management, the environmental aspect has gotten the most attention. The environmental component plays a vital part in the arrangement of economic improvement of the regions (Glinskiy et al., 2016). In light of the complex issues included in sustainable advancement, we require more clear benchmarks for arranging and assessing our natural approaches. As a critical point, sustainability includes optimizing the intelligence between nature, society, and the economy, in agreement with biological criteria. Sustainable improvement looks to reconcile environmental security and improvement; it implies nothing more than utilizing assets no speedier than they can regenerate themselves and discharging poisons to no more prominent degree than average assets can acclimatize them (Merkel, 1998).

2.2.2 Social factors

In the current era of global, territorial, national and neighbourhood improvement in all spheres of the economy, different and conflicting changes take put, influencing all processes, including administration. In like manner, enterprises are effectively included in these processes, looking for drivers of improvement and competitiveness. Consequently, enhancing management approaches and apparatuses is a critical and vital condition for ensuring sustainable advancement. The urge to shape and actualize a viable administration framework is imperative for business. In this manner, uncommon consideration is paid to applying common standards and strategies of management and carrying out measures to guarantee the steady working of companies that try to reinforce their positions in a constantly changing environment. It is vital to utilize the accomplishments of world opinion, develop critical approaches and alter methodological approaches and the like (Drobyazko et al., 2019). Biological issues caused by human activities (economic) are declining and taking on worldwide dimensions. Climate alters, ozone-layer consumption, and misfortune of timberland cover are critical illustrations. At the same time, social conditions proceed to compound in numerous creating nations. Although budgetary and financial markets are becoming increasingly interconnected, and we like to think of a "worldwide town," our endeavours to cherish natural assurance and improvement as the common assignment and duty of all nations have started to create progress. On the off chance that we are to move toward sustainable advancement, the industrialized nations ought to acknowledge special responsibility--not as it were of their past ecological activities, but also because of their present technological know-how and budgetary assets. However, one must be beyond doubt that feasible generation and consumption involve technological advances and social designs of a person's behaviour and values (Merkel, 1998).

2.2.3 Economic factors

The economic dimension of the supply chain refers to the profit earned by supply chain members and the economic benefits obtained by host nations, regions, and communities of those members. Consequently, this dimension goes beyond a company's internal profit, and some of the traits within this category may be difficult to measure in terms of money. Economic considerations are classified into four groups. (1) performance of the economy: This alludes to a company's capability to conduct business and market value. (2) Financial health refers to the firm's overall well-being and long-term viability in terms of monetary resources (3) Market and organizational structure: This relates to the state of the market and the supply chain's configuration. (4) Entities /Processes: Refers to the internal and external processes, procedures, and values of the economic dimension (Sloan, 2010). Today, sustainability is attracting more attention at both the local and global levels, prompting issues about ways to make sustainability a priority in corporate strategy and operations. Sustainable construction flow can be a beneficial way for businesses to transition from being reactive in terms of pollution and waste reduction and other sustainable activities to being proactive in terms of taking full responsibility for their products, from raw material acquisition to ultimate disposal from a sustainability standpoint. This report investigates Malaysian manufacturing organizations' sustainable supply chain management methods. The paper's main contribution is to confirm the effects of SSCM methodologies on the firm's sustainable supply chain performance. Environmental purchasing and sustainable packaging have been found to directly impact a company's performance, particularly in terms of economic performance (Rasheed, 2022; Alam, 2022).

Companies face a problem in the marketplace when competing with other businesses. This predicament arose due to rising customer expectations and complicated supplier connections. Supply chain management (SCM) has grown in importance and is a crucial problem for most firms due to intense competition (Ali, 2022). Supply chain management aims to improve an organization's operational efficiency (Hashmi et al., 2020b). The supply chain is also beneficial in operational cost-efficiency. This will automatically make a significant contribution to the organization's overall success. The function of information systems (IS) in catalyzing the phases in the entire supply chain becomes critical. Information systems enabled by advanced technology aim to speed up corporate processes by providing reliable data and quick access to data from one system to the next. Cost-effectiveness can be accomplished by having a well-functioning supply chain. In SCM research, time and speed are valued, carrying the motive of achieving speedy delivery at its most basic potential price. SCM requires flexibility to respond to market/customer needs and speed to market. Many authors have concentrated on an organization's financial performance, which is crucial; however, non-financial measurements are frequently utilized to address strategic challenges and day-to-day operations. The pharmaceutical sector plays a vital role in the economy and individuals' lives. Pharmaceuticals and their formulations are two types of pharmaceutical goods that are developed. Pharmaceutical items (drugs) begin their journey from raw ingredients to the end user via the producer. As a result, in terms of value creation, a manufacturing plant is critical to the supply chain (Victory et al., 2022). In the pharmaceutical industry, operational effectiveness impacts product quality, cost, delivery, and flexibility. Based on the research problem and relevant literature, the research model is given in Figure 1.



Figure 1: Research model

3. Research Methodology

The quantitative method was followed to test the research hypothesis. Whereas both inductive and deductive procedures can be used when dealing with mixed data of examination utilized (Rashid &

Amirah, 2017). Quantitative exploration encompasses the process of acquiring and analyzing data in an objective manner (Hashmi et al., 2021). Quantitative research means broadening in several environments; there are norms of behaviour and phenomena. Further, exploration is used to put a notion to the test and then either support or reject it. Besides, quantitative information requires factual or statistical examination to test theories (Rashid et al., 2021). A deductive method is used because it allows the research to deduce from non-specific. Moreover, the analyst constructs a hypothetical system based on common viewpoints and arrives at a specific conclusion. The deductive method of investigation or thinking comprises an investigation of theories, improvement of hypothetical systems or hypotheses, statistical testing hypothesis, and affirmation of a particular conclusion drawn coherently from premises (Rashid et al., 2021).

Further, sampling is a method (strategy or tool) used by an analyst to pick a relatively fewer quantity of delegated objects deliberately and people (a subset) of a predetermined population act as participants (information hotspot to perceive or experiment based on the investigation's goals (Agha et al., 2021; Alrazehi et al., 2021; Das et al., 2021; Haque et al., 2021; Khan et al., 2021; Rashid et al., 2021; Modgil & Sharma, 2017). Questionnaires and surveys were designed to collect data from 102 respondents from various organizations that is greater than 100 and is adequate to generalize the findings of this research (Rashid, 2016; Khan et al., 2022). The present study was conducted in the urban areas of Karachi, Pakistan, by a survey questionnaire (Rashid et al., 2021; Khan et al., 2022; Khan et al., 2022).

4. Data Analysis

The demographic profiles of respondents were analyzed to identify the various trends and found males 52% and females 50%. The respondents were 56.9% from the 25– 30 age group, 34.3 % between 30 and 35 and 8.8% between 40 – 45. The reliability test was carried out to verify model uniformity using SPSS software version 22. The results found a 0.845 Cronbach's Alpha value greater than 0.70 (Hashmi et al., 2021). The model summary expressed an R^2 of 45.2%. This means that 45 % of the time, the response variable is estimated correctly by independent variables. The ANOVA test for Analysis of Variance, where the significance value of $0.000 < 0.05$ with an F statistics value of 84.226, suggested that the model is statistically significant. Besides, the coefficients results suggested the standardized beta coefficient value of 0.676 (significant value $0.000 < 0.05$), which means a unit change in procurement strategies significantly impacts the supply chain sustainability. Hence procurement strategies are significantly adding anything to the prediction, and hypothesis $H1$ is supported.

5. Discussion

The study's hypothesis shows that procurement strategies significantly impact the viability of supply chain sustainability. This hypothesis was accepted as value .000 in the co-efficient results by implementing sustainability in our procurement process and raw material sourcing. It reduces the emission of harmful gases and soil, water and air pollution. Operational effectiveness significantly affects the material's quality and environmental health. Cost reduction benefits and increased productivity can be found. It also improves energy efficiency. Environmental control of purchasing and the supply chain (specifically green purchasing) is now remarkably commonplace in the middle of larger companies, and it shows that it is also increasingly used as a corporate practice. Participation in recycling initiatives demands close coordination with all the business partners, like an alliance with vendors to eliminate waste in raw and packaging. To build evaluation criteria with vendors, use of grading system for suppliers on their performance, design questionnaire for supplier evaluation, to set the standard of environmental process in the selection of strategic business partner, evaluation criteria should also apply in the buying process (Hamner, 2006).

The study's leading element is to analyze the influence of different procurement strategies and techniques on the long-term viability of the supply chain process. Today, sustainability is captivating more consciousness at local and global levels, pushing concern about ways to incorporate sustainability into corporate strategy and operations. Operational effectiveness has a consequence on the quality of

results, cost, delivery, and adaptability in the pharmaceutical industry. The management of the supply chain has evolved into a matter of contention due to ruthlessness. The motive of a chain of supplies management is to enhance an organization's operational efficiency. The chain of supplies further assists in the operational convenience and frugal. The OP would impulsively make a remarkable contribution to the organization's overall performance (Hashmi et al., 2021). Environmental, societal, and economic reflection all play a role in sustainability.

5.1 Conclusion

This study has some limitations, like other research studies. It has a time limitation as it was completed in a short period. Second, the study was self-contained and with no additional funds engaged in the research work. We have specifically targeted the manufacturing industry of Karachi. It has a geographical constraint, and the research was conducted only in one city, i.e., Karachi, Pakistan. The research was conducted on procurement strategies and supply chain sustainability. Future research may be conducted by using different variables. This can be done in different regions of Pakistan and outside Pakistan. Different areas of the supply chain process for sustainability impact can be focused on highlighting other significant issues for improvement and enhancing research possibilities for further learning and awareness as there is still much work to be done in developing global supply chain sustainability. Future research can also be characterized as efficient thinking about conceivable future occasions and circumstances. It is distinctive from determining in that the previous includes a forward orientation, looks ahead, or maybe reverse, and is not as numerical as estimating. There is a vast extent of strategies accessible that can be utilized to conduct prospect considers. The nature of decision-making utilizing the output of prospects ponders can be drawn closer from four elective points of view, i.e. (1). Values point of view categorizes forecasted results of occasions and events as great or terrible. Appropriately, the esteem viewpoint tends to be exceedingly subjective due to esteem differences among individuals. (2). Rational viewpoint relates to determining an elective among choice choices guided by the degree to which each elective meets specific criteria. (3). Judgment heuristics is related to a propensity towards hazard taking and depending on instinct when locked in choice making. (4). Cognitive science's point of view on choice making depends on the inductive handle of thought and taking choices due to the inductive examination by people and related computer programs. Lastly, future research might use different approaches to investigate biases in standard methods. As the majority in the world enlarges and the availability of resources reduces or minimizes, many firms or companies understand that the process of supply chains must also be re-designed in the current scenario.

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